

Appl. No. 10/731,533
Reply to Office Action of September, 2005

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AMENDMENTS TO THE CLAIMS

This listing and version of the claims replace all prior listing and versions of the claims.

Listing of Claims:

1. (Currently amended) A method for operating a plurality of stockers, comprising the steps of:

monitoring utilization of the plurality of stockers, each stocker capable of storing a plurality of wafer, LCD or reticle containers having a plurality of priorities; and

automatically transferring a first wafer, LCD or reticle container from a first one of the stockers to a second one of the stockers if the utilization of the first stocker is greater than a predetermined threshold, wherein one of the wafer, LCD or reticle containers having a high priority is moved out of the first stocker before one of the wafer, LCD or reticle containers having a lower priority.
2. (Original) The method of claim 1, wherein the first wafer, LCD or reticle container is automatically selected from a plurality of wafer containers based on a type of wafer lot contained within the each wafer container stored in the first stocker.
3. (Original) The method of claim 2, wherein the containers are divided into a plurality of types, including engineering lot containers, production lot containers, control wafer containers, and empty containers.
4. (Currently amended) The method of claim 3, wherein the ~~plurality of types are prioritized so that empty containers are moved out of the first stocker before control wafer containers, control wafer containers are moved out of the first stocker before production lot containers, and production lot containers are moved out of the first stocker before engineering lot containers~~ empty containers have a priority higher than a priority of the control wafer containers, the priority of the control wafer containers is higher than a priority of the production wafer

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containers, and the priority of the production wafer containers is higher than a priority of the engineering lot containers.

5. (Withdrawn) The method of claim 1, wherein the first wafer, LCD or reticle container is automatically selected from a plurality of wafer, LCD or reticle containers based on a reason for placing the first wafer, LCD or reticle container in the stocker.
6. (Withdrawn) The method of claim 5, wherein:
a first plurality of wafer containers contain wafer lots that are being stored between fabrication processes until required to fill an order,
a second plurality of wafer containers contain wafer lots that are to be processed in equipment that is currently unavailable; and
wafer containers from the second plurality of containers are selected to be moved before wafer containers from the first plurality of wafers.
7. (Withdrawn) The method of claim 1, wherein the first wafer, LCD or reticle container is selected based on a respective length of time that each wafer, LCD or reticle container has been stored in the first stocker.
8. (Withdrawn) The method of claim 1, wherein the second stocker is automatically selected based on a priority assigned to each stocker.
9. (Withdrawn) The method of claim 1, wherein the second stocker is automatically selected based on a utilization of each stocker.
10. (Withdrawn) The method of claim 1, wherein the second stocker is automatically selected from one of the group consisting of a primary destination stocker and an alternate destination stocker.
11. (Currently amended) An automated material handling system, comprising :
a plurality of stockers, each stocker capable of storing a plurality of wafer, LCD or reticle containers having a plurality of priorities; and

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means for monitoring utilization of the plurality of stockers;

control means for causing automatic transfer of a first wafer, LCD or reticle container from a first one of the stockers to a second one of the stockers if the utilization of the first stocker is greater than a predetermined threshold, wherein one of the wafer, LCD or reticle containers having a high priority is moved out of the first stocker before one of the wafer, LCD or reticle containers having a lower priority.

12. (Original) The system of claim 11, wherein the control means automatically select the first wafer container from a plurality of wafer containers based on a type of wafer lot contained within the each wafer container stored in the first stocker.

13. (Original) The system of claim 12, wherein the control means prioritizes a plurality of container types, including engineering lot containers, production lot containers, control wafer containers, and empty containers.

14. (Currently amended) The system of claim 13, wherein the empty containers have a priority higher than a priority of the control wafer containers, the priority of the control wafer containers is higher than a priority of the production wafer containers, and the priority of the production wafer containers is higher than a priority of the engineering lot containers~~plurality of container types are prioritized so that empty containers are moved out of the first stocker before control wafer containers, control wafer containers are moved out of the first stocker before production lot containers, and production lot containers are moved out of the first stocker before engineering lot containers.~~

15. (Withdrawn) The system of claim 11, wherein the first wafer, LCD or reticle container is automatically selected from a plurality of wafer, LCD or reticle containers based on a reason for placing the first wafer, LCD or reticle container in the stocker.

16. (Withdrawn) The system of claim 15, wherein:

a first plurality of wafer containers contain wafer lots that are being stored between fabrication processes until required to fill an order,

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a second plurality of wafer containers contain wafer lots that are to be processed in equipment that is currently unavailable; and

wafer containers from the second plurality of containers are selected to be moved before wafer containers from the first plurality of wafers.

17. (Withdrawn) The system of claim 11, wherein the first wafer, LCD or reticle container is selected based on a respective length of time that each wafer, LCD or reticle container has been stored in the first stocker.

18. (Withdrawn) The system of claim 11, wherein the second stocker is automatically selected based on a priority assigned to each stocker.

19. (Withdrawn) The system of claim 11, wherein the second stocker is automatically selected based on a utilization of each stocker.

20. (Withdrawn) The system of claim 11, wherein the second stocker is automatically selected from one of the group consisting of a primary destination stocker and an alternate destination stocker.

21. (Currently amended) A computer readable medium encoded with computer program code, wherein when the computer program code is executed by a processor, the processor performs a method for operating a plurality of stockers, comprising the steps of:

monitoring utilization of the plurality of stockers, each stocker capable of storing a plurality of wafer, LCD or reticle containers having a plurality of priorities; and

automatically transferring a first wafer, LCD or reticle container from a first one of the stockers to a second one of the stockers if the utilization of the first stocker is greater than a predetermined threshold, wherein one of the wafer, LCD or reticle containers having a high priority is moved out of the first stocker before one of the wafer, LCD or reticle containers having a lower priority.

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22. (Original) The computer readable medium of claim 21, wherein the first wafer container is automatically selected from a plurality of wafer containers based on a type of wafer lot contained within the each wafer container stored in the first stocker.

23. (Original) The computer readable medium of claim 22, wherein the containers are divided into a plurality of types, including engineering lot containers, production lot containers, control wafer containers, and empty containers.

24. (Currently amended) The computer readable medium of claim 23, wherein the empty containers have a priority higher than a priority of the control wafer containers, the priority of the control wafer containers is higher than a priority of the production wafer containers, and the priority of the production wafer containers is higher than a priority of the engineering lot containers~~plurality of types are prioritized so that empty containers are moved out of the first stocker before control wafer containers, control wafer containers are moved out of the first stocker before production lot containers, and production lot containers are moved out of the first stocker before engineering lot containers.~~

25. (Withdrawn) The computer readable medium of claim 21, wherein the first wafer, LCD or reticle container is automatically selected from a plurality of wafer, LCD or reticle containers based on a reason for placing the first wafer, LCD or reticle container in the stocker.

26. (Withdrawn) The computer readable medium of claim 25, wherein:
a first plurality of wafer containers contain wafer lots that are being stored between fabrication processes until required to fill an order,
a second plurality of wafer containers contain wafer lots that are to be processed in equipment that is currently unavailable; and
wafer containers from the second plurality of containers are selected to be moved before wafer containers from the first plurality of wafers.

27. (Withdrawn) The computer readable medium of claim 21, wherein the first wafer, LCD or reticle container is selected based on a respective length of time that each wafer, LCD or reticle container has been stored in the first stocker.

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28. (Withdrawn) The computer readable medium of claim 21, wherein the second stocker is automatically selected based on a priority assigned to each stocker.

29. (Withdrawn) The computer readable medium of claim 21, wherein the second stocker is automatically selected based on a utilization of each stocker.

30. (Withdrawn) The computer readable medium of claim 21, wherein the second stocker is automatically selected from one of the group consisting of a primary destination stocker and an alternate destination stocker.

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